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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/025,143	02/18/98	BURKE	M 9318-0004

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EXAMINER

LAO, S

ART UNIT

PAPER NUMBER

2755

DATE MAILED:

9
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/025,143

Applicant(s)

Burke

Examiner

S. Lao

Group Art Unit

2755



☒ Responsive to communication(s) filed on Dec 6, 1999

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-21 is/are pending in the application

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-21 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

DETAILED ACTION

1. Claims 1-21 are presented for examination. This action is in response to the amendment filed 6/12/1999. Applicant has amended claims 1, 7, 11, 17, 21.

2. Claims 1-12, 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foody et al (U. S. Pat. 5,732,270) in view of Mowbray et al ("The Essential CORBA: System Integration Using Distributed Objects", pp. 231-267).

As to claim 1, Foody teaches (col. 6, line 47 - col. 7, line 15; fig.s 1, 2, 7c, 8, 10, 11) computer system for retrieving object definition information (interoperate multiple heterogeneous object systems, object exporting framework 7) comprising:

one or more software objects encoded in computer readable form (real foreign object),

said one or more objects having at least one interface defined in a first notation (native proxy constructed for the real foreign object), said one or more objects encapsulating (contains an identifier and a pointer to) object definition information (object definitions) specified in a second notation (real foreign object), said second notation being different from said first notation (heterogeneous object systems).

Foody does not teach without translating the object definition from the second notation into the first notation since Foody may involve generating an interface description in a language appropriate to the foreign object system (col. 6, lines 65-67).

Mowbray teaches integrating object definitions of different notations (wrapping to provide layering of API's to legacy systems). Mowbray teaches two alternative encapsulating/wrapping techniques, one with substantial changes / translations between the notations, and one without modifying/translating the underlying interfaces/notation. See page 232, last para. - page 233, 2nd para.; page 237, 2nd-3rd para.s; page 238, table. Since Foody desires integrating two object systems and Mowbray provides a method to do so, it would have been obvious to include the second alternative of integration, ie,

encapsulating/wrapping without translating/modifying the notation/underlying interfaces so as to provide a uniform access mechanism (page 238, table).

As to claims 2-4, Foody teaches using the system ("The system" 105) to interoperate multiple heterogeneous object systems including CORBA and non-CORBA systems (col.s 1-4). GDMO/ASN.1 is a well known non-CORBA system, a legacy system. CORBA is more modern. Encapsulating/wrapping a legacy system with a modern interface is well known and taught by Foody (interoperating). Therefore, it would have been obvious to encapsulate the second notation (GDMO/ASN.1) with the first notation (CORBA IDL).

As to claims 5-6, Foody teaches metadata repository (OSA registry 9), dynamic gateway (system 105) for manipulating objects defined at least in part in said second notation by means of invocations on interfaces defined in said first notation (when proxy is manipulated, in turn, resulting in corresponding manipulation of the foreign object). See col. 6, line 66 - col. 7, line 2.

As to claim 7, note discussions of claims 1 and 6. Foody further teaches invoking means of first notation (manipulate the proxy object), returning object definition information in a second notation (object exporting framework 7).

As to claims 8-10, note discussions of claims 2-4, respectively.

As to claim 11, note discussion of claim 1. Further, Foody teaches parser for object definition information (system 105), an object factory for instantiating objects encapsulating said object definition information (object exporting framework 7), said objects having predefined interfaces (foreign object).

As to claims 12, 14-15, note discussions of claims 2-4, respectively.

As to claim 16, Foody teaches (col. 12, lines 9-28) means for resolving (Type Description Framework 3) object definition name information (Namespace) into an object reference for an object definition type (Type).

As to claim 17, note the discussion of claim 1 and Foody further teaches manipulating (manipulate). See col. 6, line 65.

As to claims 18-20, note discussions of claims 2-4, respectively.

As to claim 21, note discussions of claims 1, 5-6, further, Foody teaches constructing an object invocation (construct method call for real object, fig. 7c), instantiating an object collection of objects corresponding to rules specifying the syntax of said object invocation (object exporting framework 7), receiving information of the content of the object invocation (fig. 7c), interrogating the object collection with the information to determine a set of objects sufficient to construct the invocation (Type Description Framework 3, Forwarding Engines Framework 4). Additionally see col. 8, line 40 - col. 18, line 2.

3. Claims 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Foody et al in view of Mowbray et al as applied to claim 11 and further in view of CORBA Specification 1.1.

As to claim 13, CORBA Specification 1.1 teaches (pages 29-30) CORBA server (object implementation) using CORBA Dynamic Skeleton Interface (IDL skeleton). Since Foody and CORBA Specification address distributed object oriented systems, it would have been obvious to combine the teachings.

4. Applicant's arguments filed 12/6/1999 have been considered but are moot in view of the new ground(s) of rejection. Applicant amended claims have added limitations not previously recited, thus, requiring a new grounds of rejection.

Regarding the amended feature of encapsulating without translating the object definition from the second notation into the first notation, it is met by Mowbray in that Mowbray teaches the alternative to encapsulating with translation / substantial modification is to encapsulate without translation / substantial modification to object definition notation. See discussion of claim 1 for detail. Such mechanism of Mowbray is to extend the interface or to provide a quick and powerful wrapping and distribution of the service through a popular object notation such as CORBA. See page 237, 2nd-3rd paragraphs.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

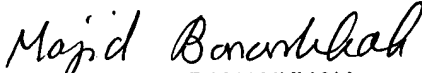
A shortened statutory period for response to this final action is set to expire **THREE MONTHS** from the date of this action. In the event a first response is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sue Lao whose telephone number is (703) 305-9657. A voice mail service is also available at this number. The fax number for this Group is (703) 305-9731.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Sue Lao

January 20, 2000


MAJID A. BANANKHAH
PRIMARY EXAMINER